

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1, 9-17 are rejected under 35 U.S.C. 102(b) as being anticipated by Kraus et al. (U.S. Patent 4,137,381 hereinafter, "Kraus").

Regarding claim 1, Kraus discloses a polyvinyl chloride (PVC) composition further comprising alkylarylsulfonic acids (Col. 2, line 1) and in addition, the corresponding alkylarylsulfonic acid salts (Col. 2, line 13). As taught in the instant specification, sulfonic acids function as an acidic corrosive reagent and the corresponding sulfonic acid salts function as cathodic corrosion inhibitors.

Regarding claims 9-16, Kraus teaches a composition comprising alkylarylsulfonic acid catalysts selected from a group including naphthalene-sulfonic acids benzene-sulfonic acids (Col. 3, lines 35-46).

Regarding claim 17, the applicant claims an inherent property of the acidic silanol condensation catalyst of claim 11. Claim 11 is anticipated by Kraus and therefore, the instant claim drawn to the inherent property of being moisture crosslinkable is rejected.

3. Claims 1-8, 18-19, 22-26 are rejected under 35 U.S.C. 102(b) as being anticipated by Nakane et al. (U.S. Patent 6,030,571 hereinafter, "Nakane").

Regarding claims 1-4, Nakane teaches a polymer composition comprising of 3 parts: A) a compound of two or more carboxyl groups (Col. 2, lines 63-67), B) a compound of functional groups that can form chemical bonds with the compound of A), including hydrolyzable alkoxysilane groups (Col. 11, lines 54-56), and C) a catalytic component including alkylbenzenesulfonic acids (Col. 27, line 1) and Lewis acids containing Tin (Col. 4, line 21-26).

Regarding claims 5-6, Nakane teaches a compound claiming corrosion resistance (Col. 1, line 25) comprising a Lewis acid containing Tin (Col. 4, line 21-26).

Regarding claim 7, the applicant claims an inherent corrosion inhibiting property of the metal acid of claim 5. Claim 5 is anticipated by Nakane and therefore, the instant claim drawn to the inherent property of corrosion inhibition during polymeric processing is rejected.

Regarding claim 8, the applicant claims an inherent corrosion inhibiting property of the metal acid of claim 5. Claim 5 is anticipated by Nakane and therefore, the instant claim drawn to the inherent property of corrosion inhibition after the fabrication of an article from the polymeric composition is rejected.

Regarding claim 18, Nakane teaches a polymeric composition comprising an olefinic polymer (Col. 11, lines 54-56), a catalytic component/acid corrosive reagent including alkylbenzenesulfonic acids (Col. 27, line 1), and a corrosion inhibiting component of Lewis acids containing Tin (Col. 4, line 21-26). The cathodic corrosion

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inhibitor taught in Nakane is a separate compound and is not conventional silanol condensation catalyst attached to the silane-functionalized polymer.

Regarding claim 19, Nakane further teaches that a foaming agent may be added to the composition of instant claim 1 (Col. 32, lines 51-52).

Regarding claims 22-23, Nakane teaches embodiments of the polymer composition may include application on wires (Col. 35, line 10) and other corrosion-prone electric parts such as printed circuit boards (Col. 33, lines 12-13) which would contain at least in portion, metal substrates.

Regarding claims 24-25, Nakane teaches a polymer composition comprising hydrolyzable alkoxy silane groups (Col. 11, lines 54-56), a silanol condensation catalytic component including alkylbenzenesulfonic acids (Col. 27, line 1), and Lewis acids containing Tin (Col. 4, line 21-26). Moisture crosslinkability is an inherent property of silanol condensation catalysts. The cathodic corrosion inhibitor taught in Nakane is a separate compound and is not conventional silanol condensation catalyst attached to the silane-functionalized polymer.

The recitations of instant claim 26 can be found in reference in Column 2, line 55 to Column 3, line 27.

4. Claims 5-11, 20-21 are rejected under 35 U.S.C. 102(b) as being anticipated by Mizuno et al. (WO/2001/070885 hereinafter, "Mizuno"). For convenience and translation purposes, the reference will be cited from the English language equivalent US PG PUB 2003/0130412.

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Regarding claims 5-11, 20-21, Mizuno teaches polymer composition comprising a Silicone polymer (Page 7, paragraph 93), sulfonic acid catalyst (Page 8, paragraph 93), and further compounds of both catalytic and corrosion resisting function including alkali-earth metal compounds and amines that may be used in combination (Page 10, paragraph 117).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to TIMOTHY CHIANG whose telephone number is (571)270-7348. The examiner can normally be reached on Monday - Thursday 9:00AM-5:00PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Sample can be reached on 5712721376. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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Supervisory Patent Examiner
Art Unit 4131

/T. C./
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